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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,417	10/15/2003	Dong-Soo Nam	102-1001	4388

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EXAMINER

MORRISON, THOMAS A

ART UNIT PAPER NUMBER

3653

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/684,417	Applicant(s) NAM, DONG-SOO	
	Examiner Thomas A. Morrison	Art Unit 3653	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-16, 18 and 24 is/are allowed.
- 6) ☒ Claim(s) 1-9, 17, 19-23 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/18/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular, the **different elasticity** of the elastic members was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-9, 19-23 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1 and its dependent claims 2-9, claim 1 recites paper discharging **rollers** and idle **rollers**, and then recites that a sheet of paper is discharged through **the** paper-discharging **roller** and **the** idle **roller**. As such, it is unclear if

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applicant is trying to claim multiple paper discharging rollers and multiple idle rollers or just one paper discharge roller and one idle roller.

Claims 19-23 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: (1) the omitted structure of the spacing adjustment unit in claim 19 that allows constant pressure to be maintained between corresponding ones of the paper-discharging rollers and the idle rollers regardless of an external force exerted on one of the supporting plate and the supporting bracket; (2) the structure in claim 19 or claim 20 that allows the distance between the supporting plate and the middle portion of the supporting bracket to vary according the spacing adjustment unit while maintaining constant contact pressure, as set forth in claim 20; (3) the omitted structure or material property of the supporting bracket in claim 23 that allows the middle portion of the supporting bracket to not be deformed in a direction perpendicular to an axis passing through a center of each of the paper-discharging rollers while the supporting plate is elastically deformed; and (4) the omitted structure in claim 25 that allows the support plate axis of the supporting plate to no longer be parallel to at least one of the first center axis and the second center axis according to a force exerted on the supporting plate and the supporting bracket while the first center axis and the second center axis are maintained parallel to each other.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 19-20 and 22, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,265,869 (Morita). In particular, the Morita patent discloses all of the limitations of claims 19-23.

Regarding claim 19, Figs. 1-2B show a paper-discharging apparatus to discharge a sheet of paper between a plurality of paper-discharging rollers (8 and 8) and a plurality of idle rollers (9 and 9), which are rotated by corresponding ones of the paper-discharging rollers (8 and 8) in an image-forming device, the paper-discharging apparatus including

a supporting plate (5) formed on a paper-discharging port side of the image-forming device;

a supporting bracket (7) having opposite ends mounted on the supporting plate (5), and having a middle portion formed between the opposite ends, on which the idle rollers (9) are rotatably mounted to contact corresponding ones of the paper-discharging rollers (8); and

a spacing adjustment unit (including 13 and 12) to flexibly couple the supporting plate (5) and the middle portion of the supporting bracket (7) to maintain a contact pressure generated between corresponding ones of the paper-discharging rollers (8) and the idle rollers (9) regardless of an external force exerted on the supporting plate (5). More specifically, the spacing adjustment unit (including 13 and 12) flexibly couples the supporting plate (5) to the entire bracket (7). As such, the spacing adjustment unit (including 12 and 13) indirectly flexibly couples the supporting plate (5) and the middle portion of the supporting bracket (7).

Regarding claim 20, Figs. 1-2B and the Abstract disclose that a distance between the supporting plate (5) and the middle portion of the supporting bracket (7) varies according to the spacing adjustment unit (including 12 and 13) while the contact pressure is maintained constant.

Regarding claim 22, Fig. 1 shows that a distance between the middle portion of the supporting bracket (7) and the paper-discharging rollers (8) is maintained constant.

#### ***Response to Arguments***

4. Applicant's arguments filed August 25, 2005 have been fully considered but they are not persuasive.

Regarding the rejection of claim 17, applicant pointed out a section of the specification of the instant application that states that the elastic unit can be implemented in various forms. However, such disclosure does not provide sufficient disclosure to one of ordinary skill in the art to make and/or use the invention without

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undue experimentation. Accordingly, it is the examiner's position that there is insufficient disclosure in the numbered paragraph [0036] of the instant application for enablement of claim 17.

Applicant's response to the rejections under 35 U.S.C. 112, second paragraph is moot in view of the new grounds of rejection.

Regarding claim 19, applicant argues that Morita does not teach a spacing adjustment unit to flexibly couple the supporting plate and the middle portion of the supporting bracket. In response, it is noted that the spacing adjustment unit (including 13 and 12) of Morita flexibly couples the supporting plate (5) to the entire bracket (7). As such, the spacing adjustment unit (including 12 and 13) indirectly flexibly couples the supporting plate (5) and the middle portion of the supporting bracket (7).

***Allowable Subject Matter***

5. Claims 10-16, 18 and 24 are allowed.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on (571) 272-6944. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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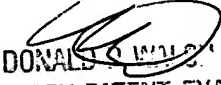
published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

  
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